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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,916	06/04/2004	Gary S. Strumolo	81093147 (FGT 1901 PA)	3915
28549	7590	05/16/2006	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			CROSLAND, DONNIE L	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/709,916

Applicant(s)

STRUMOLO ET AL.

Examiner

DONNIE L. CROSLAND

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The substitute specification filed 2-13-06 conforms to 37 CFR 1.125(b) and (c) and has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-8, 10, 11, 14, 15, and 17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Luna et al, newly cited.

Luna shows a warning system for a host vehicle comprising a first magneto-resistive sensor coupled to the host vehicle for sensing a first magnetic field variation in a first area external to the host vehicle and generating a first sensor signal; and a controller coupled to the host vehicle receiving the first sensor signal, the controller generating a signal for activating a vehicle system (LED) in response to the first signal, see paragraphs 0005 0009, and 0011.

With respect to claim 4, note interface for indicator element in paragraphs 0005 and 0022.

With respect to claim 5, note LED in paragraph 0022.

With respect to claim 6, note second sensor area in paragraph 0030.

With respect to claim 7, note sensor location in paragraphs 0018, 0019, and 0030.

With respect to claim 8, note signal-conditioning algorithm in paragraphs 0033, 0037, 0046, and 0047.

With respect to claim 10, see abstract.

With respect to claim 11, the recited "countermeasure" reads on the indicator elements activated by the sensor output signals, which indicator elements can be perceived by the driver, paragraphs 0005 and 0022.

With respect to claim 14, the recited "required countermeasures" reads on different level warnings, paragraph 0022.

With respect to claim 15, note filtering and averaging in paragraphs 0043 and 0045.

With respect to claim 17, the vehicle state algorithm is determined by the calibration data as discussed in paragraphs 0030-0042.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3, 9, 12, 13, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luna et al, newly cited.

With respect to claims 2, 12, and 19, a vehicle bus would not involve patentable invention since vehicle "bus" for vehicle operations as well as interfacing various additional vehicle components is conventional in prior art systems as evidenced by the use of conventional vehicle bus (wiring harness). It would have been obvious to one having ordinary skill in the art to interface the sensor of Luna through a conventional vehicle bus because the use of a vehicle bus for interfacing is conventional.

With respect to claims 3 and 13, a vehicle bus for receiving at least one of a vehicle type information signal is conventional in vehicle prior art systems that include a vehicle bus. The conventional vehicle bus interfaces with numerous vehicle functions for generating type information signals.

With respect to claim 9, the recited temporal and signal strength correlations algorithms in conjunction with a threshold comparison is obvious over the calibration data and correction of sensor data in order to compensate for distortion, paragraphs 0033-0046. The recited temporal and signal strength correlations corresponds to Luna's components Bx and By in the magnetic field and the obtaining of the calibrated data.

With respect to claim 16, the analysis of the magnetic field signature for determining object size would have been obvious over the information on the object with

respect to the three spatial components in the detected magnetic field, see paragraph 0045.

With respect to claim 18, "which countermeasure" is obvious over different level of warning including distinct indicator elements, paragraph 0022.

With respect to claim 20, see paragraph 0022.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.


### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mattes et al, Bomya, Bartingale et al, and Perez et al are cited as showing vehicle detection devices employing magnetoresistive sensors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is 571-272-2980. The examiner can normally be reached on Mon-Thur, 9:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL HORABIK can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DONNIE L. CROSLAND  
Primary Examiner  
Art Unit 2612

DLC   
5-10-06